

## EAST Search History

| Ref # | Hits  | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|-------|--|---|------------------|---------|------------------|
| S1    | 7     | ((("3745423") or ("4218270") or ("5233204")).PN. or (WO02/09242).CCLS.   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:18 |
| S2    | 0     | S1 and (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and germanium and temperature   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:23 |
| S3    | 0     | (germanium near4 (substrate or wafer or semiconductor)) and "GaP" and "GaInAlP" and (temperature or heat\$4 or thermal\$4) and gallium and "OMVPE" | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:24 |
| S4    | 0     | (germanium near4 (substrate or wafer or semiconductor)) and "GaP" and "GaInAlP" and (temperature or heat\$4 or thermal\$4) and gallium             | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:25 |
| S5    | 0     | (germanium near4 (substrate or wafer or semiconductor)) and "GaP" and "GaInAlP" and (temperature or heat\$4 or thermal\$4)                         | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:25 |
| S6    | 0     | (germanium near4 (substrate or wafer or semiconductor)) and "GaP" and "GaInAlP"  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:25 |
| S7    | 11    | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP"  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:25 |
| S8    | 9     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:25 |
| S9    | 1     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature and butyl  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:26 |
| S10   | 51629 | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature phosphine  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2006/03/14 14:26 |

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| S11 | 1     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature and phosphine    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT                       | OR | OFF | 2006/03/14 14:26 |
| S12 | 9     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature                  | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT                       | OR | ON  | 2006/03/14 14:26 |
| S13 | 9     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:27 |
| S14 | 1     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature and germanium    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:27 |
| S15 | 9     | (substrate or wafer or semiconductor) and "GaP" and "GaInAlP" and temperature                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:29 |
| S16 | 0     | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "GaInAlP" and temperature | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:29 |
| S17 | 16597 | (germanium near4(substrate or wafer or semiconductor))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:29 |
| S18 | 4115  | (germanium near4(substrate or wafer or semiconductor)) and "GaP"                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:29 |
| S19 | 0     | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "GaInAlP"                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2006/03/14 14:30 |

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|-----|----------|---|---|----|----|------------------|
| S20 | 35       | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:31 |
| S21 | 32       | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP" and (temperature or heat or thermal)                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:31 |
| S22 | 0        | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP" and (temperature or heat or thermal) and phosphie                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:32 |
| S23 | 17227341 | n   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:32 |
| S24 | 10       | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP" and (temperature or heat or thermal) and phosphine               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:32 |
| S25 | 1        | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP" and (temperature or heat or thermal) and (butyl near4 phosphine) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:32 |
| S26 | 8        | (germanium near4(substrate or wafer or semiconductor)) and "GaP" and "AlGaInP" and (temperature or heat or thermal) and phosphine and gallium   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:42 |
| S27 | 35       | "AlGaInP" and "GaP" and (germanium near4(substrate or wafer or semiconductor))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:48 |

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|-----|----|--|---|----|----|------------------|
| S28 | 35 | "AlGaInP" and ("GaP" or "gallium phosphide") and (germanium near4(substrate or wafer or semiconductor))              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:55 |
| S29 | 41 | "AlGaInP" and ("GaP" or (gallium near4 phosph\$4)) and (germanium near4(substrate or wafer or semiconductor))        | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 14:56 |
| S30 | 21 | "AlGaInP" and (gallium near4 phosph\$4) and (germanium near4(substrate or wafer or semiconductor))                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/14 15:03 |
| S31 | 13 | "AlGaInP" and "gallium phosphide" and (germanium near4(substrate or wafer or semiconductor))                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 08:00 |
| S32 | 10 | "LED" and "AlGaInP" and (gallium near4 phosph\$4) and (germanium near4 substrate) and temperature                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 08:55 |
| S33 | 19 | "AlGaInP" and (gallium near4 phosph\$4) and ("TMG" or trimethylgallium)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 08:56 |
| S34 | 6  | "AlGaInP" and (gallium near4 phosph\$4) and ("TMG" or trimethylgallium) and ("BP" or butylphosphine)                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 08:57 |
| S35 | 4  | "AlGaInP" and (gallium near4 phosph\$4) and ("TMG" or trimethylgallium) and ("BP" or butylphosphine) and temperature | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:00 |

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| S36 | 0   | "AlGaInP" and ("TMG" or trimethylgallium) and ("BP" or butylphosphine) and temperature and "OMVPE" | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:01 |
| S37 | 624 | "OMVPE"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:01 |
| S38 | 68  | "OMVPE" and "AlGaInP"  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:02 |
| S39 | 60  | "OMVPE" and "AlGaInP" and temperature  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:02 |
| S40 | 0   | "OMVPE" and "AlGaInP" and temperature and ("BP" or butylphosphine)                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:02 |
| S41 | 0   | "OMVPE" and "AlGaInP" and temperature and butylphosphine   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:02 |
| S42 | 4   | "OMVPE" and "AlGaInP" and temperature and trimethylgallium   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/03/15 09:03 |